

Remarks

I. Status and Nature of the Amendments

This application is a continuation of US Patent Application Serial No. 09/633,269, filed on August 4, 2000 (pending), which application is a continuation of US Patent Application Serial No. 08/537,928 (which issued on April 17, 2001, as U.S. Patent No. 6,217,873), filed on January 5, 1996 as a 35 USC 371 application of PCT International Patent Application PCT/IB94/00093, filed on May 4, 1994. Claims 1 and 20-45 have been examined.

Applicants have amended claim 1 to more clearly describe Applicants' invention. Support for the amendments can be found throughout the specification (please see, for example, page 9, line 15 – page 10, line 13). Applicants have amended the claims in order to more clearly describe the definition of the term "peptide" and to describe the baseplate polypeptide as having both an amino terminus and a carboxyl terminus. Support for such recitations can be found, for example, at page 8, lines 27-23, page 10, lines 22-35; Figure 1, Figure 7, etc. Claim 22 has been amended to be an independent claim. No new matter has been added by any of the requested amendments, which are fully supported by the originally filed specification.

II. The Objections to the Specification

The Examiner has advised that continuing data is not mentioned in the first paragraph of the specification. Applicants have herewith updated the status of the continuing data of the application, and respectfully submit that such amendment fully addresses the Examiner's concerns. It is submitted that any objection to the specification based on this issue may be properly withdrawn.

III. The Information Disclosure Statement

The Examiner has advised Applicants that non-patent literature and other foreign documents cited in Applicants' Information Disclosure Statement were not provided and

hence were not considered. Applicants appreciate the Examiner's courtesy in granting the undersigned a telephonic interview on May 19, 2006, at which this issue was discussed. During the interview, the Examiner confirmed that all of the cited references had been previously submitted and were in the files of the parent applications of the present application. The Examiner further advised the undersigned that in light of the fact that the references were in the files of the United States Patent & Trademark Office, their resubmission was unnecessary, and they would be considered and made of record by the Examiner. Applicants appreciate the assistance of the Examiner.

IV. The Rejections Relating to 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claims 1, 20-43 and 44 pursuant to 35 U.S.C. § 112, second paragraph in light of a concern that these claims are indefinite. Applicants respectfully traverse and request reconsideration.

Specifically, the Examiner has advised that claim 1 is indefinite in reciting a "homogeneous polyoxime composition," since it is alleged that the meaning of the term "homogeneous" is unclear. Applicants respectfully draw the Examiner's attention to page 8, line 24 – page 9, line 5, wherein the definition of "homogeneous polyoxime composition" is explicitly provided. As noted therein, the term denotes compositions in which the polyoxime molecules employed possess substantially (i.e., at least 80%) identical structures, in contrast to molecules of a typical organic polymer preparation that differ in length and/or in specific structure. Two molecules are thus "homogeneous if their structures are identical, and a baseplate linked to multiple identical polyoxime compositions is, in the context of the present invention, said to be a baseplate comprising a homogenous polyoxime composition. Applicants respectfully submit that the rejection of claim 1 pursuant to 35 U.S.C. § 112, second paragraph in light of Applicants' use of the term "homogeneous polyoxime composition," may be properly withdrawn.

The Examiner has additionally rejected claim 1 as indefinite in light of its recitation of “[a] homogeneous polyoxime composition attached to a solid phase” in light of a concern that the chemical linkage to the solid phase and the attaching molecule are both unclear. Applicants have amended claim 1 to provide clarify the antecedent basis and structure of the claim. In light of Applicants’ amendment, it is respectfully submitted that the rejection of claim 1 pursuant to 35 U.S.C. § 112, second paragraph in light of Applicants’ use of the term “[a] homogeneous polyoxime composition attached to a solid phase” may be properly withdrawn.

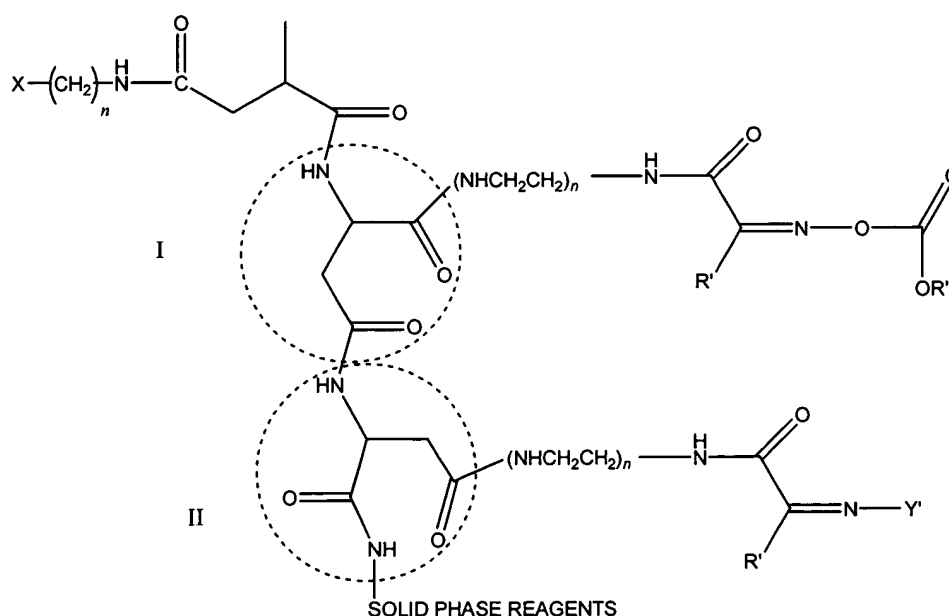
The Examiner has additionally rejected claim 44 as indefinite in light of its recitation “said amino-oxy peptide baseplate comprising one or more amino acids having a side chain modified with a protected or unprotected amino-oxy group.” In doing so, the Examiner has expressed concern that it may be unclear whether the amino-oxy peptide baseplate comprises only one or more amino acids or whether the amino-oxy peptide baseplate comprises more than one amino acid of which only one or more had amino-oxy side groups. Applicants have amended claim 44 to clarify that the amino-oxy peptide baseplate comprises a peptide that contains two or more amino acids having a side chain modified with a protected or unprotected amino-oxy group. It is respectfully submitted that the art recognized definition of “a peptide” is a polymer composed of two or more amino acid residues. In light of Applicants’ amendment, it is respectfully submitted that the rejection of claim 44 pursuant to 35 U.S.C. § 112, second paragraph in light of Applicants’ use of the term “said amino-oxy peptide baseplate comprising two or more amino acids having a side chain modified with a protected or unprotected amino-oxy group” may be properly withdrawn.

The Examiner has additionally rejected claim 35 in light of a concern that the carriers encompassed within the term “pharmaceutically acceptable carriers” is unclear. Applicants respectfully submit that the term “pharmaceutically acceptable carrier” is a term of art (referring to carriers of a compound that are physiologically tolerated), appearing in

nearly **49,000** issued U.S. Patents from 1976 to the present. In light of such widespread usage, it is respectfully submitted that the rejection of claim 35 due to its inclusion of this term may be properly withdrawn.

V. The Rejections Relating to 35 U.S.C. § 102(b)

The Examiner has rejected claims 1, 20, 21, 24, 25, 28, 29, 32, and 41 as anticipated by U.S. Patent No. 4,812,532 (Stolowitz *et al.*). Stolowitz *et al.* is said to disclose homogeneous polyoxime compositions attached to a solid phase. The Examiner has particularly directed Applicants' attention to Formula IX of Stolowitz *et al.* as showing a baseplate of two aspartic acid residues linked with an amide bond. Applicants have reproduced Formula IX of Stolowitz *et al.* below, noting the locations of the two aspartic acid residues with dashed circles I and II:



Applicants respectfully traverse and request reconsideration. Applicants' claims are directed to a polypeptide baseplate that is bonded to at least two organic molecules through oxime linkages involving the side chains of the amino acids of the peptide baseplate molecule. As the Examiner will appreciate, Stolowitz *et al.* fails to teach such a

composition (i.e., the organic molecule bonded to aspartic acid I is not bonded through the side chain of that residue). In light of Applicants' amendment, it is respectfully submitted that the rejection of claims 1, 20, 21, 24, 25, 28, 29, 32, and 41 as anticipated by U.S. Patent No. 4,812,532 (Stolowitz *et al.*) may be properly withdrawn.

The Examiner has rejected claims 1, 20-28, 30-41 as anticipated by U.S. Patent No. 6,310,180 (Tam *et al.*). Tam *et al.* is said to disclose homogeneous polyoxime compositions attached to a solid phase. Applicants respectfully traverse and request reconsideration.

Applicants have amended the claims to clarify that the polypeptide baseplate possesses an amino and a carboxyl terminus. As the Examiner will appreciate, the "lysine tree" baseplate disclosed by Tam *et al.* comprises multiple lysine residues assembled so as to lack a carboxyl terminus. In light of Applicants' amendment, it is respectfully submitted that the rejection of claims 1, 20-28, 30-41 as anticipated by U.S. Patent No. 6,310,180 (Tam *et al.*) may be properly withdrawn.

VI. The Rejections Relating to 35 U.S.C. § 103(a)

The Examiner has rejected claims 43-45 as obvious in light of Tam *et al.* in view of Degrado *et al.* As indicated above, Tam *et al.* is said to disclose homogeneous polyoxime compositions attached to a solid phase. Degrado *et al.* is said to disclose an oxime resin as a solid reagent for peptide synthesis. Applicants respectfully traverse and request reconsideration.

It is respectfully submitted that dependent claim 43 is patentable over Tam *et al.* at least for the same reasons as its base claim is patentable: e.g., that Tam *et al.* fails to teach a composition in which the baseplate peptide possesses both an amino terminus and a carboxyl terminus. It is respectfully submitted that Degrado *et al.* fails to remedy this deficiency. Applicants similarly submit that independent claims 44 and 45 are patentable over the combined teachings of Tam *et al.* and Degrado *et al.* since such combined

teachings fail do not suggest a composition in which the baseplate peptide possesses both an amino terminus and a carboxyl terminus. Applicants respectfully submit that the rejection of claims 43-45 as obvious in light of Tam *et al.* in view of Degrado *et al.* may be properly withdrawn.

The Examiner has rejected claims 43-45 as anticipated by Stolowitz *et al.* in view of Degrado *et al.* As indicated above, Stolowitz *et al.* is said to disclose homogeneous polyoxime compositions attached to a solid phase. Degrado *et al.* is said to disclose an oxime resin as a solid reagent for peptide synthesis. Applicants respectfully traverse and request reconsideration.

It is respectfully submitted that dependent claim 43 is patentable over Stolowitz *et al.* at least for the same reasons as its base claim is patentable: e.g., that Stolowitz *et al.* fails to teach a composition in which at least two "second" organic molecules are attached to a peptide baseplate via oxime bonds between side chains and the "second" organic molecules. It is respectfully submitted that Degrado *et al.* fails to remedy this deficiency. Applicants similarly submit that independent claims 44 and 45 are patentable over the combined teachings of Stolowitz *et al.* and Degrado *et al.* since such combined teachings fail do not suggest a composition in which at least two "second" organic molecules are attached to a peptide baseplate via oxime bonds between side chains and the "second" organic molecules. Applicants respectfully submit that the rejection of claims 43-45 as obvious in light of Stolowitz *et al.* in view of Degrado *et al.* may be properly withdrawn.

VII. The Rejection Relating to Double Patenting

The Examiner has rejected claims 1 and 20-45 on the ground of non-statutory obviousness-type double patenting in light of United States Patents Nos. 6,001,364 (claims 1-14), 6,174,530; 6,217,873 (claims 1-5 and 12-14) or 6,663,869 (claims 1-17 and 23-26) in view of Degrado *et al.*

Applicants respectfully submit that in the absence of Allowable subject matter a rejection on the ground of non-statutory obviousness-type double patenting is premature. In the event that Allowable subject matter is identified, and the Examiner then determines that a rejection on the ground of non-statutory obviousness-type double patenting is appropriate, Applicants will consider filing a Terminal Disclaimer to obviate such a rejection. It is requested that, at present, the Examiner hold such rejection in abeyance.

VIII. Concluding Remarks

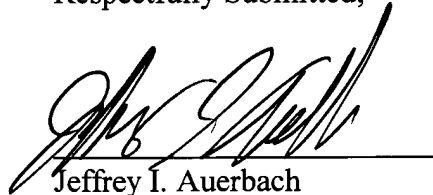
Applicants submit that the present response is complete and complies with the requirements of 35 U.S.C. §121. The presently pending claims are believed to be in condition for Allowance and early notice of such favorable action is respectfully requested. Should the Examiner have any remaining questions regarding the subject invention or its patentability, Applicant encourages the Examiner to contact the undersigned to answer such questions or provide additional information.

Respectfully Submitted,

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